

Marked up version of current claims:

1. (amended) A computer-implemented network modeling method, comprising:
~~organizing business data by enterprise into the components of value and two or more elements of value where at least one element of value is intangible;~~
~~identifying value drivers by element of value that are causal to changes in the components of value for each enterprise;~~
~~summarizing the value drivers into composite variables by element of value and enterprise; and~~
~~modeling the components of value using said composite variables to determine the value of the elements of value to the business by enterprise.~~
aggregating enterprise related data that complies with a common data dictionary, and
analyzing at least a portion of said data to create network models.
2. (amended) The modeling method of claim 1 wherein ~~modeling the components of value for each where~~ enterprise further comprises:
~~using composite variables as inputs to a series of predictive component of value models where the output~~related data is obtained from the series ~~determines the relative weighting for each element of value for each component of value;~~
~~capitalizing the component of value forecasts;~~group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and
~~calculating the value of each element of value to an enterprise with the value equaling the sum of the product of the weighting factor for each element of value and the capitalized component of value forecasts~~ combinations thereof.
3. (amended) The modeling method of claim 1 wherein the intangible element of value is selected from the group consisting of relationships, customers, employees, brands, partners and vendors. (amended) The method of claim 1 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

4. ~~(amended) The modeling method of claim 1 that further comprises the use of a paper document or an electronic display to report the value of the elements of value.~~(amended) The method of claim 1 where data is analyzed using models from the group consisting of neural network models; regression models, generalized additive models; support vector method models, entropy minimization models, Bayesian models, induction models, multivalent models, and combinations thereof.

5. ~~(amended) The modeling method of claim 1 wherein the value of the business where data is market value~~aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

6. ~~(amended) The modeling method of claim 1 wherein the elements of value contain items that are optionally clustered into sub-elements of value for more detailed analysis.~~(amended) The method of claim 1 where the network models quantify the inter-relationship between each element of value, other elements of value and aspects of enterprise financial performance.

7. ~~(amended) The modeling method of claim 16 wherein data is obtained~~the elements of value are selected from the group consisting of ~~advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems~~brands, customers, employees, partners, production equipment and purchasing systems~~vendors relationships.~~

8. ~~(amended) The modeling method of claim 16 wherein at least a portion of the data is obtained from the Internet~~aspects of enterprise financial performance are revenue, expense, capital change and market value.

9. ~~(amended) The modeling method of claim 4 wherein~~6 where weights from the best fit network models quantify a relative contribution for each element of value to an aspect of enterprise is defined by a revenue component of valuefinancial performance.

10. ~~(amended) The modeling method of claim 1 wherein the revenue component of value that defines an enterprise can include the revenue from~~a single product, a group of products, a division or an entire company.

11. ~~(amended) The modeling method of claim 1 wherein each enterprise contains a revenue component of value together with an optional expense component of value and an optional capital change component of value.~~(amended) A computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a plurality of computers that have been connected via a network to perform a network modeling method, comprising:

aggregating enterprise related data that complies with a common data dictionary, and analyzing at least a portion of said data to create network models.

12. ~~(amended) The modeling method of claim 1 wherein the value provided for each element of value is for a specified point in time within a sequential series of points in time.~~(amended) The computer readable medium of claim 11 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

13. ~~(amended) The modeling method of claim 1 wherein one or more elements of value can be excluded from the calculation if their contribution to the value of the business can be determined directly.~~(amended) The computer readable medium of claim 11 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

14. ~~(amended) The modeling method of claim 1 wherein the value of each element of value to each enterprise is determined by its net impact on the components of value and the other elements of value for that enterprise.~~(amended) The computer readable medium of claim 11 where data is analyzed using models from the group consisting of neural network models; regression models, generalized additive models; support vector

method models, entropy minimization models, Bayesian models, induction models, multivalent models, and combinations thereof.

~~15. (amended) The modeling method of claim 1 wherein the composite variables are mathematical or logical combinations of causal item performance indicators and item variables.~~(amended) The computer readable medium of claim 11 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

~~16. (amended) The modeling method of claim 1 wherein the method for creating composite variables is determined by the level of interaction between elements of value.~~(amended) The computer readable medium of claim 11 where the network models quantify the inter-relationship between each element of value, other elements of value and aspects of enterprise financial performance.

~~17. (amended) The modeling method~~computer readable medium of claim 16 wherein the elements of value drivers are selected from the group consisting of item variablesbrands, customers, employees, partners, production equipment and totals,~~rolling totals, rates of change, averages, rolling averages, trends and time lagged trends derived from numeric and date fields in the item variable data~~vendors relationships.

~~18. (amended) The modeling method of claim 2 wherein genetic algorithms are used to evolve the predictive models to their optimal configuration.~~(amended) The computer readable medium of claim 16 wherein the aspects of enterprise financial performance are revenue, expense, capital change and market value.

~~19. (amended) The modeling method~~computer readable medium of claim 2 wherein the ~~series of predictive~~16 where weights from the best fit network models further comprises:
a neural net modelare used to selectdetermine the value driver candidates;
a model selected from the group consistingto the enterprise of each element of entropy minimization, lagrange and path analysis models to finalize the value driver selection.

20. (amended) ~~A~~The computer readable medium having ~~sequences of instructions stored therein, which when executed cause the processor in claim 11 where an enterprise is a computer to perform~~single product, a modeling method, comprising:

~~organizing business data by enterprise into the components~~group of value and two products, a division or more elements of value where at least one element of value is intangible;

~~identifying value drivers by element of value that are causal to changes in the components of value for each enterprise,~~

~~summarizing the value drivers into composite variables by element of value and enterprise; and~~

~~modeling the components of value using said composite variables to determine the value of the elements of value to the business by enterprise~~a company.

21. (amended) ~~The computer readable medium of claim 20 wherein the intangible element of value is selected from the group consisting of relationships, customers, employees, brands, partners and vendors.~~(amended) A network modeling system, comprising:

a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

aggregate enterprise related data that complies with a common data dictionary, and

analyze at least a portion of said data to create network models.

22. (amended) ~~The computer readable medium of claim 20 that further comprises the use of a paper document or an electronic display to report the value of the elements of value.~~(amended) The system of claim 21 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

23. (amended) ~~The computer readable medium~~system of claim 20 ~~wherein~~21 where the value of data dictionary defines standard data attributes from the business is

marketgroup consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

~~24. (amended) The computer readable medium of claim 20 wherein the elements of value contain items that are optionally clustered into sub-elements of value for more detailed analysis.~~(amended) The system of claim 21 where data is analyzed using models from the group consisting of neural network models; regression models, generalized additive models; support vector method models, entropy minimization models, Bayesian models, induction models, multivalent models, and combinations thereof.

~~25. (amended) The computer readable medium of claim 20 wherein data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems and purchasing systems.~~(amended) The system of claim 21 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

~~26. (amended) The computer readable medium of claim 20 wherein at least a portion of the data is obtained from the Internet.~~(amended) The system of claim 21 where the network models quantify the inter-relationship between each element of value, other elements of value and aspects of enterprise financial performance.

~~27. (amended) The computer readable mediumsystem of claim 2026 wherein each enterprise is defined by a revenue componentthe elements of value, together with an optional expense component are selected from the group consisting of brands, customers, employees, partners, production equipment and an optional capital change componentvendors relationships.~~

~~28. (amended) The computer readable medium of claim 20 wherein the revenue component of value that defines an enterprise can include the revenue from a single~~

~~product, a group of products, a division or an entire company.~~(amended) The system of claim 26 wherein the aspects of enterprise financial performance are revenue, expense, capital change and market value.

29. ~~(amended) The computer readable medium of claim 20 wherein each enterprise contains a revenue component of value together with an optional expense component of value and an optional capital change component of value.~~(amended) The system of claim 26 where best fit models are identified by genetic algorithms and the weights from the best fit network models are used in developing models for simulation and optimization of enterprise financial performance.

30. ~~(amended) The computer readable medium of claim 20 wherein the components of value can be divided into subcomponents of value for more detailed analysis.~~(amended) The system of claim 21 where an enterprise is a single product, a group of products, a division or a company.

31. ~~(amended) The~~A computer readable medium of claim 20 wherein the value provided for each implemented element of value is for a specified point in time within a sequential series of points in time.method, comprising:

aggregating enterprise related data that complies with a common data dictionary, and analyzing at least a portion of said data with a series of models to identify one or more value drivers for each of one or more elements of value.

32. ~~(amended) The computer readable medium of claim 20 wherein one or more elements of value can be excluded from the calculation if their contribution to the value of the business can be determined directly.~~(amended) The method of claim 31 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

33. ~~(amended) The computer readable medium~~method of claim 20~~31~~ wherein the value method further comprises:

creating equations that summarize the impact of each element of value to each enterprise is determined by its net impact on the one or more components of value and the other elements of value for that enterprise.

34. (amended) ~~The computer readable medium method of claim 20 wherein~~³³ ~~where the composite variable equations are mathematical or logical combinations of causal item performance indicators and item variables~~value drivers.

35. (amended) ~~The computer readable medium method of claim 20~~³³ ~~wherein the method for creating composite variables is determined by the level of interaction between elements of value.~~further comprises:

modeling aspects of enterprise financial performance using output from said equations to determine the contribution of each element of value to enterprise financial performance, and
displaying the contribution using a paper document or electronic display.

36. (amended) ~~The computer readable medium of claim 20 wherein the value drivers are selected from the group consisting of item variables and totals, rolling totals, rates of change, averages, rolling averages, trends and time lagged trends derived from numeric and date fields in the item variable data.~~(amended) The method of claim 35 wherein the aspects of enterprise financial performance are revenue, expense, capital change and market value.

37. (amended) ~~The computer readable medium of claim 20 wherein sequences of instructions stored therein are optionally used to cause the processors in the computers in a network to perform the financial management method of claim 1.~~(amended) An element modeling system, comprising:

a plurality of computers, each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

aggregate enterprise related data that complies with a common data dictionary,
and

analyze at least a portion of said data with a series of models to identify one or more value drivers for each of one or more elements of value.

38. (amended) ~~A modeling~~The system, comprising:

~~a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when~~

~~executed cause~~claim 37 where enterprise related data is obtained from the processor
to:

~~organize business data by enterprise into the components~~group consisting of
~~value~~advanced financial systems, basic financial systems, operation
~~management systems, sales management systems, human resource systems,~~
~~accounts receivable systems, accounts payable systems, capital asset systems,~~
~~inventory systems, invoicing systems, payroll systems, purchasing systems and~~
~~two or more elements of value where at least one element of value is intangible;~~
~~identify value drivers by element of value that are causal to changes in the~~
~~components of value for each enterprise,~~
~~summarize the value drivers into composite variables by element of value and~~
~~enterprise; and~~

~~model the components of value using said composite variables to determine the value of~~
~~the elements of value to the business by enterprise~~combinations thereof.

39. (amended) ~~A computer implemented evaluation method, comprising:~~(amended) The
system of claim 37 wherein the processors further:

~~organizing business data by component of value, element of value, growth option and~~
~~enterprise;~~
~~determining the value of each element of value and growth option to a value of the~~
~~business; and~~
~~reporting the business value and the value of each element of value and growth~~
~~option.~~
create equations that summarize the impact of each element of value on one or more
aspects of enterprise financial performance.

40. (amended) ~~The computer implemented evaluation method~~system of claim 39
wherein the elements of value are selected from the group consisting of ~~relationships,~~
brands, customers, employees, brands, ~~partners, production equipment and vendors~~
relationships.

41. (amended) ~~The computer implemented evaluation method~~system of claim 39
wherein ~~the method for reporting the value of the business, the growth options and the~~
~~elements of value is~~processors further:

model aspects of enterprise financial performance using output from said equations to determine the contribution of each element of value to enterprise financial performance, and

display the contribution using a paper document or an electronic display.

42. ~~(amended) The computer implemented evaluation method of claim 39 wherein the value of the business is market value.~~(amended) The system of claim 41 where models are from the group consisting of neural network models; regression models, generalized additive models; support vector method models, entropy minimization models, Bayesian models, induction models, multivalent models, and combinations thereof.

43. ~~(amended) The computer implemented evaluation method of claim 39 wherein the elements of value contain items that are optionally clustered into sub-elements of value for more detailed analysis.~~(amended) A computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a plurality of computers that have been connected via a network to perform an element method, comprising:

aggregating enterprise related data that complies with a common data dictionary, and analyzing at least a portion of said data with a series of models to identify one or more value drivers for each of one or more elements of value.

44. ~~(amended) The computer implemented evaluation method of claim 39 wherein data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems and purchasing systems.~~(amended) The computer readable medium of claim 43 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

45. ~~(amended) The computer implemented evaluation method~~readable medium of claim 39~~43 wherein at least a portion of the data is obtained from the Internet.~~method further comprises:

creating equations that summarize the impact of each element of value on one or more aspects of enterprise financial performance.

~~46. (amended) The computer implemented evaluation method of claim 39 wherein the value provided for each element of value and growth option is for a specified point in time within a sequential series of points in time.~~(amended) The computer readable medium of claim 45 where an enterprise is a single product, a group of products, a division or a company.

~~47. (amended) The computer implemented evaluation method readable medium of claim 3945 wherein the value of each element of value to the business is determined by its net impact on the components of value and the other elements of value for that business.~~method further comprises:

modeling aspects of enterprise financial performance using output from said equations to determine the contribution of each element of value to enterprise financial performance, and
displaying the contribution using a paper document or electronic display.

~~48. (amended) The computer implemented evaluation method readable medium of claim 3947 wherein the contributions can be used to determine the value to the enterprise of each growth option is calculated using a dynamic programming algorithm.~~element of value.

~~49. (amended) The computer implemented evaluation method of claim 39 that further comprises:~~(amended) An enterprise tools method, comprising:

~~deriving enterprise current operation cash flow from the components of value;~~
~~identifying a historical relationship between enterprise market value and the value of enterprise growth options and current operation cash flow; and~~
~~using the historical relationship and forecasts of current operation cash flow and growth option values to forecast future business market value.~~aggregating enterprise related data that complies with a common data dictionary, and
using at least a portion of said data to create tools for enterprise management.

50. (new) The method of claim 49 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation

management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

51. (new) The method of claim 49 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

52. (new) The method of claim 49 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

53. (new) The method of claim 49 where the tools for enterprise performance management are from the group consisting of element performance indicators, element value drivers, element impact summaries, predictive revenue models, predictive expense models, capital change predictive models, element contribution percentages, element valuations, current operation valuations, growth option valuations, market sentiment calculations, enterprise value models, equity forecast models, enterprise valuations, network models, simulation models, optimization models, market value models, management reports and combinations thereof.

54. (new) The method of claim 49 where value drivers are causal element performance indicators and element performance indicators are selected from the group consisting of element variables, element variable ratios, element variable trends, element variable averages, element variable totals, time lagged element variable values, element variable rates of change and combinations thereof.

55. (new) The method of claim 49 where the element impact summaries are mathematical combinations of value drivers, logical combinations of value drivers or combinations thereof.

56. (new) A computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a plurality of computers that have been connected via a network to perform an enterprise tools method, comprising:

aggregating enterprise related data that complies with a common data dictionary, and using at least a portion of said data to create tools for enterprise management.

57. (new) The computer readable medium of claim 56 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

58. (new) The computer readable medium of claim 56 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

59. (new) The computer readable medium of claim 56 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

60. (new) The computer readable medium of claim 56 where the tools for enterprise performance management are from the group consisting of element performance indicators, element value drivers, element impact summaries, predictive revenue models, predictive expense models, capital change predictive models, element contribution percentages, element valuations, current operation valuations, growth option valuations, market sentiment calculations, enterprise value models, equity forecast models, enterprise valuations, network models, simulation models, optimization models, market value models, management reports and combinations thereof.

61. (new) The computer readable medium of claim 56 where value drivers are causal element performance indicators and element performance indicators are selected from the group consisting of element variables, element variable ratios, element variable

trends, element variable averages, element variable totals, time lagged element variable values, element variable rates of change and combinations thereof.

62. (new) The computer readable medium of claim 56 where the element impact summaries are mathematical combinations of value drivers, logical combinations of value drivers or combinations thereof.

63. (new) An enterprise tools system, comprising:

a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

aggregate enterprise related data that complies with a common data dictionary,
and

use at least a portion of said data to create tools for enterprise management.

64. (new) The system of claim 63 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

65. (new) The system of claim 63 where the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

66. (new) The system of claim 63 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

67. (new) The system of claim 63 where the tools for enterprise performance management are from the group consisting of element performance indicators, element value drivers, element impact summaries, predictive revenue models, predictive

expense models, capital change predictive models, element contribution percentages, element valuations, current operation valuations, growth option valuations, market sentiment calculations, enterprise value models, equity forecast models, enterprise valuations, network models, simulation models, optimization models, market value models, management reports and combinations thereof.

68. (new) The system of claim 63 where value drivers are causal element performance indicators and element performance indicators are selected from the group consisting of element variables, element variable ratios, element variable trends, element variable averages, element variable totals, time lagged element variable values, element variable rates of change and combinations thereof.

69. (new) The system of claim 63 where the element impact summaries are mathematical combinations of value drivers, logical combinations of value drivers or combinations thereof.

70. (amended) An enterprise data method, comprising:

aggregating enterprise related data that complies with a common schema to support enterprise processing.

71. (new) The method of claim 70 where enterprise related data is obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

72. (new) The method of claim 70 where the schema comprises a data structure and a data dictionary and the data dictionary defines standard data attributes from the group consisting of account numbers, components of value, currencies, elements of value, enterprise designations, time periods, units of measure and combinations thereof.

73. (new) A computer readable medium having sequences of instructions stored therein, which when executed cause the processors in a plurality of computers that have been connected via a network to perform an enterprise data method, comprising:

aggregating enterprise related data that complies with a common data dictionary to support enterprise processing.

74. (new) The computer readable medium of claim 73 where data is aggregated by retrieving data stored in accordance with the common data dictionary, accepting data prepared in accordance with the common data dictionary, converting data to the common data dictionary or combinations thereof.

75. (new) The computer readable medium of claim 73 where an enterprise is a single product, a group of products, a division or a company.

76. (new) An enterprise data system, comprising:

a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor to:

aggregate enterprise related data that complies with a common data dictionary to support enterprise processing.

77. (new) The system of claim 76 where enterprise processing supports the development of tools for enterprise performance management.

78. (new) The system of claim 77 where the tools for enterprise performance management are from the group consisting of element performance indicators, element value drivers, element impact summaries, predictive revenue models, predictive expense models, capital change predictive models, element contribution percentages, element valuations, current operation valuations, growth option valuations, market sentiment calculations, enterprise value models, equity forecast models, enterprise valuations, network models, simulation models, optimization models, market value models, management reports and combinations thereof.

Remarks

The Applicant respectfully requests consideration of the present application as amended herewith.

Payment Enclosed

The Applicant has enclosed payment for the claims added to the instant application. The payment amount was calculated as shown on the enclosed fee determination record.

Respectfully submitted,

Dated: 11/03/2003



Jeff S. Eder, Practitioner Number 52,849